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10/776,380	02/12/2004	Hideo Nanataki	03500.017903	3935

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
WALSH, RYAN D	

ART UNIT	PAPER NUMBER
2852	

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H'B

Office Action Summary	Application No.	Applicant(s)	
	10/776,380	NANATAKI ET AL.	
	Examiner	Art Unit	
	Ryan D. Walsh	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 February 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/6/04 & 6/3/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed on February 18, 2003. It is noted, however, that applicant has not filed a certified copy of the priority document application as required by 35 U.S.C. 119(b).

Drawings

Figures 4a,4b, and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: (Pg.11, Ln. 20-21) discloses an arrow pointing in a clockwise direction. Figure 2 (11) shows the arrow following a counter-clockwise direction. Also, (Pg.14, Ln. 5) discloses an arrow pointing in a counter-clockwise direction. Figure 2 (16) shows the arrow following a clockwise direction. Appropriate correction is required.

The disclosure is objected to because of the following informalities: Improper grammar (Pg.22, Ln.19). If the word "to" is removed after "fixing roller 1" the sentence will be correct.

Appropriate correction is required.

Claim Objections

Claim 2 objected to because of the following informalities: The word "completes" at the end of claim 2 is improper grammar. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al (US 2005/0074252) in view of Sakai et al (US Pat. 5,682,576).

Regarding claim 1, Hirst et al discloses "A heating apparatus (Fig. 1,Ref.# 10) for heating a material to be heated, the material being inserted in a nip to be nipped and conveyed therein using heat of rotary member comprising: a rotary member (Fig. 1,Ref.# 12); an opposing member (Fig. 1,Ref.# 14), forming nip with respect to said rotary member; a heating member (Fig. 1,Ref.# 16), for heating another portion other than the nip in a surface said rotary member; and temperature control means (Pg. 1, [0015]) for controlling a temperature of the rotary member heated by said heating member." Hirst et al does not teach "wherein after insertion of the material to be heated

in the nip starts, the temperature control means raises a temperature of said heating member or increases power supplied to said heating member before the completion of one revolution of rotary member."

However, "the temperature control means raises a temperature of said heating member or increases power supplied to said heating member before the completion of one revolution of rotary member" is routine in the art as shown by the teaching of Sakai et al. (see Col. 11, Ln. 1-4 and Col. 12, Ln. 1-5). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hirst et al's invention by raising the temperature of the heating member before the completion of one revolution of the rotary member.

The ordinary artisan would have been motivated to so modify Hirst et al's invention in a manner described above for at least the purpose of providing stable fixability.

Regarding claim 2, Hirst et al does not teach "wherein the temperature control means powers the temperature of said heating member or decreases the power supplied to said heating member before the material to be heated discharged from the nip completes."

However, "the temperature control means powers the temperature of said heating member or decreases the power supplied to said heating member before the material to be heated discharged from the nip completes" is routine in the art as shown by the teaching of Sakai et al. (see Fig. 15 and Col. 11, Ln. 1-4 and Col. 12, Ln. 1-5). It would have been obvious to one ordinary skilled in the art at the time the invention was

made to modify Hirst et al's invention by decreasing the power supplied to the heating member before the material is discharged from the nip.

The ordinary artisan would have been motivated to modify Hirst et al's invention in a manner described above for at least the purpose of providing stable power usage.

Regarding claim 3, Hirst et al does not teach "wherein after the insertion of the material to be heated in the nip starts, in the case that L assumed as a distance from the nip to the portion the rotary member surface to be heated by the heating member along a rotating direction of said rotary member, and V assumed as tangential speed for rotation of said rotary member, said temperature control means raises the temperature of said heating member or increases the power supplied to said heating member within L/V."

However, "said temperature control means raises the temperature of said heating member or increases the power supplied to said heating member within L/V" is routine in the art as shown by the teaching of Sakai et al. (Col. 11, Ln. 6-8). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hirst et al's invention by increasing the power to the heating member within L/V (a specific amount of time).

The ordinary artisan would have been motivated to modify Hirst et al's invention in a manner described above for at least the purpose of stabilizing fixabilty over the entire surface of the paper.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al (US 2005/0074252) in view of Sakai et al (US Pat. 5,682,576) and in further view of Kagawa et al (US Pat. 6,088,549).

Regarding claim 4, the combination of Hirst et al and Sakai et al teaches "A heating apparatus according claim 1," but fail to teach "wherein said heating member heats a surface said rotary member through a film, and wherein said temperature control means includes temperature detecting means in contact with a film surface opposite to another film surface contacting said rotary member in a portion in which the film contacts the surface of said rotary member. "

However, "said heating member heats a surface said rotary member through a film, and wherein said temperature control means includes temperature detecting means in contact with a film surface opposite to another film surface contacting said rotary member in a portion in which the film contacts the surface of said rotary member" is routine in the art as shown by the teaching of Kagawa et al. (see Col. 10, Ln. 64-65 and Col. 13, Ln. 14-20). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Hirst et al and Sakai et al's inventions to detect the temperature on a film surface contacting said rotary member.

The ordinary artisan would have been motivated to modify the combination of Hirst et al and Sakai et al's inventions in the manner described above to determine a more precise temperature measurement of the rotary member.

Regarding claim 5, the combination of Hirst et al and Sakai fail to teach "wherein said temperature detecting means is disposed in the portion in which the film contacts the surface of said rotary member on an upstream side in a rotating direction of said rotary member."

However, "said temperature detecting means is disposed in the portion in which the film contacts the surface of said rotary member on an upstream side in a rotating direction of said rotary member" is routine in the art as shown bythe teaching of Kagawa et al. (see Fig. 1, ref.# 55b: seen as upstream or downstream). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Hirst et al and Sakai et al's inventions to detect the temperature on a film surface on an upstream side, contacting said rotary member.

The ordinary artisan would have been motivated to modify the combination of Hirst et al and Sakai et al's inventions in the manner described above to determine a temperature measurement in a different location, near the rotary member, providing more accurate control.

Regarding claim 6, the combination of Hirst et al and Sakai fail to teach "wherein said temperature detecting means is disposed in the portion in which the film contacts the rotary member surface on a downstream side in the rotating direction of said rotary member."

However, "said temperature detecting means is disposed in the portion in which the film contacts the rotary member surface on a downstream side in the rotating direction of said rotary member" is routine in the art as shown by the teaching of

Kagawa et al. (see Fig. 1, ref.# 55b: seen as upstream or downstream). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Hirst et al and Sakai et al's inventions to detect the temperature on a film surface on an downstream side, contacting said rotary member.

The ordinary artisan would have been motivated to modify the combination of Hirst et al and Sakai et al's inventions in the manner described above to determine a temperature measurement in a different location, near the rotary member, providing more accurate control.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al (US 2005/0074252) in view of Sakai et al (US Pat. 5,682,576) and in further view of Hasegawa et al (US Pat. 6,701,102).

Regarding claim 7, the combination of Hirst et al and Sakai teaches "A heating apparatus according to claim 1," but fail to teach "wherein the heating member includes a ceramic heater as a heating source, and wherein the temperature control means includes temperature detecting means is disposed to a back surface of the ceramic heater. "

However, "the heating member includes a ceramic heater as a heating source, and wherein the temperature control means includes temperature detecting means is disposed to a back surface of the ceramic heater" is routine in the art as shown by the teaching of Hasegawa et al. (see Col. 13, Ln. 4-5, 49-52). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the

combination of Hirst et al and Sakai et al's inventions to include a ceramic heater as a heating source, and a temperature detecting means on the back of the ceramic heater.

The ordinary artisan would have been motivated to modify the combination of Hirst et al and Sakai et al's inventions in the manner described above to include a heater with low heat capacity and temperature sensing means, for better control.

Regarding claim 8, Hirst et al teaches "wherein the opposing member is a rotary member (Fig. 1,Ref.# 12). "

Regarding claim 9, Hirst et al teaches "wherein said heating material a recording material bearing an image (Pg. 1, [0009] Ln. 12-14). "

Regarding claim 10, The combination of Hirst et al and Sakai teaches "a fixing apparatus including a heating apparatus according to claim 1," but fail to teach "an image forming apparatus, comprising: an image forming device for forming an unfixed toner image on a recording material so as to be borne thereon."

However, "an image forming apparatus, comprising: an image forming device for forming an unfixed toner image on a recording material so as to be borne thereon" is routine in the art as shown by the teaching of Hasegawa et al. (see Col. 6, Ln. 59-63). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Hirst et al and Sakai et al's inventions to include an image forming apparatus, to form an unfixed toner image on a recoding material.

The ordinary artisan would have been motivated to modify the combination of Hirst et al and Sakai et al's inventions in the manner described above to include an

image forming apparatus to fix an image on a recording material (paper, transparency, etc.).

Claim 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al (US Pat. 6,701,102) in view of Hirst et al (US 2005/0074252).

Regarding claim 11, Hasegawa et al teaches "An image forming apparatus, comprising: an image forming part for forming an unfixed toner image on a recording material so as to be borne thereon; and a fixing part for heat-fixing the unfixed toner on the recording material to the recording material (see Col. 6, Ln. 59-63)." Hasegawa et al also teaches "so as to increase an amount of heat supplied to the first rotary member substantially at timing when a position of the member to be heated reaches a portion of first rotary member to be contacted with a leading edge of the heating material in the nip (see Col. 12, Ln. 51-60). " Hasegawa et al does not teach "wherein said fixing part includes a first rotary member and a second rotary member that are contact with each other form a nip and a heating member for heating the first rotary member in a position different from the nip, and fixes an image formed on a material to be heated using heat of the first rotary member by inserting the material to be heated the nip, wherein the image forming apparatus further comprises a power control part for controlling power to be supplied to the heating member."

However, "wherein said fixing part includes a first rotary member and a second rotary member that are contact with each other form a nip and a heating member for heating the first rotary member in a position different from the nip, and fixes an image formed on a material to be heated using heat of the first rotary member by inserting the

material to be heated the nip, wherein the image forming apparatus further comprises a power control part for controlling power to be supplied to the heating member" is routine in the art as shown by the teaching of Hirst et al. (see Pg. 1, [0009],[0010], and [0015]). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hasegawa et al's invention by including a fixing part includes a first rotary member and a second rotary member that are contact with each other form a nip and a heating member for heating the first rotary member in a position different from the nip, and fixes an image formed on a material to be heated using heat of the first rotary member by inserting the material to be heated the nip, wherein the image forming apparatus further comprises a power control part for controlling power to be supplied to the heating member.

The ordinary artisan would have been motivated to modify Hasegawa et al's invention in a manner described above for at least the purpose of providing stable fixability.

Regarding claim 12, Hasegawa et al does not teach "further comprising temperature detecting means for detecting temperature of a rotary member, wherein the power control part controls power to be supplied to the heating member based on detection temperature for the temperature detecting means and target temperature."

However, "further comprising temperature detecting means for detecting temperature of a rotary member, wherein the power control part controls power to be supplied to the heating member based on detection temperature for the temperature detecting means and target temperature" is routine in the art as shown by the teaching

of Hirst et al. (See Pg. 2, [0017], [0018], and [0019]). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hasegawa et al's invention by including a temperature detecting means for detecting temperature of a rotary member, wherein the power control part controls power to be supplied to the heating member based on detection temperature for the temperature detecting means and target temperature.

The ordinary artisan would have been motivated to modify Hasegawa et al's invention in a manner described above for at least the purpose of providing a stable temperature.

Regarding claim 13, Hasegawa et al teaches "wherein substantially at the timing when the position the heating member reaches the portion of the first rotary member to be contacted with the leading edge of the heating material in the nip (see Col. 12, Ln. 51-60)." Hasegawa et al does not teach "the power control part performs one of switching the target temperature and switching correlation of the detection temperature for the temperature detecting means and the target temperature with the power to be supplied to the heating member, thereby increasing the amount of heat supplied to the first rotary member."

However, "the power control part performs one of switching the target temperature and switching correlation of the detection temperature for the temperature detecting means and the target temperature with the power to be supplied to the heating member, thereby increasing the amount of heat supplied to the first rotary member" is routine in the art as shown by the teaching of Hirst et al. (see Pg. 2, [0029]).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hasegawa et al's invention by including the power control part performs one of switching the target temperature and switching correlation of the detection temperature for the temperature detecting means and the target temperature with the power to be supplied to the heating member, thereby increasing the amount of heat supplied to the first rotary member.

The ordinary artisan would have been motivated to modify Hasegawa et al's invention in a manner described above for at least the purpose of stabilizing fixabilty over the entire surface of the paper.

Regarding claim 14, Hasegawa et al teaches "wherein substantially at timing when the position of the heating member reaches a portion of the first rotary member to be contacted with a trailing edge of the heating material in the nip (see Col. 12, Ln. 51-60)." Hasegawa et al does not teach "the power control part controls the power to be supplied to the heating member so as to decrease the amount of heat supplied to the first rotary member."

However, "the power control part controls the power to be supplied to the heating member so as to decrease the amount of heat supplied to the first rotary member" is routine in the art as shown by the teaching of Hirst et al. (see Pg. 2, [0021]). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hasegawa et al's invention by including the power control part controls the power to be supplied to the heating member so as to decrease the amount of heat supplied to the first rotary member.

The ordinary artisan would have been motivated to modify Hasegawa et al's invention in a manner described above for at least the purpose of stabilizing fixabilty over the entire surface of the paper.

Regarding claim 15, Hasegawa et al teaches "An image forming apparatus according to claim 14," and also teaches "substantially the timing when the position of the heating member reaches by the portion of the first rotary member to be contacted with the trailing edge of the heating material in the nip (see Col. 12, Ln. 51-60)." Hasegawa et al fails to teach "further comprising temperature detecting means for detecting temperature of a rotary member, wherein the power control part controls power to be supplied to the heating member based on detection temperature for the temperature detecting means and target temperature" and "performs one switching the target temperature and switching correlation of the detection temperature for the temperature detecting means and the target temperature with the power to be supplied to the heating member, thereby decreasing the amount of heat supplied to the first rotary member. "

However, "further comprising temperature detecting means for detecting temperature of a rotary member, wherein the power control part controls power to be supplied to the heating member based on detection temperature for the temperature detecting means and target temperature" and "performs one switching the target temperature and switching correlation of the detection temperature for the temperature detecting means and the target temperature with the power to be supplied to the heating member, thereby decreasing the amount of heat supplied to the first rotary

member" is routine in the art as shown by the teaching of Hirst et al. (see Pg. 2, [0017]-[0019] and [0021]). It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hasegawa et al's invention by further comprising temperature detecting means for detecting temperature of a rotary member, wherein the power control part controls power to be supplied to the heating member based on detection temperature for the temperature detecting means and target temperature and performs one switching the target temperature and switching correlation of the detection temperature for the temperature detecting means and the target temperature with the power to be supplied to the heating member, thereby decreasing the amount of heat supplied to the first rotary member.

The ordinary artisan would have been motivated to modify Hasegawa et al's invention in a manner described above for at least the purpose of stabilizing fixabilty over the entire surface of the paper.

Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al (US Pat. 6,701,102) in view of Hirst et al (US 2005/0074252) and in further view of Kagawa et al (US Pat. 6,088,549).

Regarding claim 16, the combination of Hasegawa et al and Hirst et al teach "An image forming apparatus according to claim 11" but fail to teach "wherein the heating member heats a surface of the first rotary member through a film, wherein the temperature detecting means contacts a film surface opposite to a film surface contacting the first rotary member in a portion in which the film contacts the surface of the first rotary member."

However, "wherein the heating member heats a surface of the first rotary member through a film, wherein the temperature detecting means contacts a film surface opposite to a film surface contacting the first rotary member in a portion in which the film contacts the surface of the first rotary member" is routine in the art as shown by the teaching of Kagawa et al (see Col. 10, Ln. 64-65 and Col. 13, Ln. 14-20). It would have been obvious to modify the combination of Hasegawa et al and Hirst et al's inventions to detect the temperature on a film surface contacting said rotary member.

The ordinary artisan would have been motivated to modify the combination Hirst et al and Hirst et al's inventions in the manner described above to determine a more precise temperature measurement of the rotary member.

Regarding claim 17, the combination of Hasegawa et al and Hirst et al fail to teach "wherein the temperature detecting means disposed the portion in which the film contacts the surface the first rotary member on an upstream side in a rotating direction said rotary member. "

However, "wherein the temperature detecting means disposed the portion in which the film contacts the surface the first rotary member on an upstream side in a rotating direction said rotary member" is routine in the art as shown by the teaching of Kagawa et al. (see Fig. 1, ref.# 55b: seen as upstream or downstream). It would have been obvious to modify the combination of Hasegawa et al and Hirst et al's inventions to detect the temperature on a film surface on an upstream side, contacting said rotary member.

The ordinary artisan would have been motivated to modify the combination Hirst et al and Sakai et al's inventions in the manner described above to determine a different temperature measurement, near the rotary member, providing better control means.

Regarding claim 18, the combination of Hasegawa et al and Hirst et al fail to teach "wherein the temperature detecting means is disposed in the portion in which the film contacts the surface of the first rotary member on a downstream side in the rotating direction the rotary member. "

However, "wherein the temperature detecting means is disposed in the portion in which the film contacts the surface of the first rotary member on a downstream side in the rotating direction the rotary member" is routine in the art as shown by the teaching of Kagawa et al. (see Fig. 1, ref.# 55b: seen as upstream or downstream). It would have been obvious to modify the combination of Hasegawa et al and Hirst et al's inventions to detect the temperature on a film surface on an downstream side, contacting said rotary member.

The ordinary artisan would have been motivated to modify the combination Hirst et al and Sakai et al's inventions in the manner described above to determine a temperature measurement in a different location, near the rotary member, providing better control means.

Regarding claim 19, Hasegawa et al teaches "wherein the heating member includes a ceramic heater as a heating source, and wherein the ceramic heater has the temperature detecting means disposed at a back surface of the ceramic heater (see Col. 13, Ln. 4-5, 49-52). "

Regarding claim 20, Hasegawa fails to teach "wherein the heating material is a recording material bearing an image."

However, "wherein the heating material is a recording material bearing an image" is routine in the art as shown by the teachings of Hirst et al. (see Pg. 1, [0009] Ln. 12-14). It would have been obvious to modify Hasegawa et al's invention where the heating material is a recording material bearing an image.

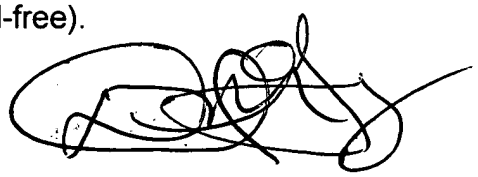
The ordinary artisan would have been motivated to modify Hasegawa et al's invention in the manner described above for at least the purpose of recording on a medium to provide stable fixability.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Walsh whose telephone number is 571-272-2726. The examiner can normally be reached on M-F 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan D. Walsh
Patent Examiner
Art Unit 2852

David Gray
Primary Examiner